TM

(FILE 'HOME' ENTERED AT 15:40:10 ON 26 AUG 2009) FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 15:41:26 ON 26 AUG 2009 3029 S SEQUENCING (3A) NUCLEIC ACIDS T.1 \Rightarrow s 11 and free (3a) 3(2a) hydroxyl 66 L1 AND FREE (3A) 3(2A) HYDROXYL => s 12 and nucleotide (3a) label 16 L2 AND NUCLEOTIDE (3A) LABEL => dup rem 13 PROCESSING COMPLETED FOR L3 16 DUP REM L3 (0 DUPLICATES REMOVED) => s 14 and not (2a) dideoxy? MISSING TERM 'AND NOT' The search profile that was entered contains a logical operator followed immediately by another operator. => d 14 bib abs 1-16 ANSWER 1 OF 16 USPATFULL on STN T.4 ΑN 2009:196266 USPATFULL ΤI End Modification to Prevent Over-Representation of Fragments IN Rigatti, Roberto, Essex, UNITED KINGDOM Gormley, Niall Anthony, Essex, UNITED KINGDOM Bignell, Helen Rachel, Essex, UNITED KINGDOM PΙ US 20090176662 A1 20090709 US 2007-223761 A1 20070207 (12) AΙ WO 2007-GB427 20070207 20081117 PCT 371 date PRAI US 2006-771358P 20060208 (60) DTUtility FS APPLICATION KLAUBER & JACKSON, 411 HACKENSACK AVENUE, HACKENSACK, NJ, 07601, US LREP CLMN Number of Claims: 20 ECL Exemplary Claim: 1 DRWN No Drawings LN.CNT 2221 CAS INDEXING IS AVAILABLE FOR THIS PATENT. The invention relates to a method of preparing a 5' and 3' modified AΒ library of template polynucleotides and also the use of the 5' and 3' modified library of templates in methods of solid-phase nucleic acid amplification. In particular, the invention relates to a method of preparing a 5' and 3' modified library of template polynucleotides which have common sequences at their 5' ends and at their 3' ends, wherein over-representation of "end" sequences of the primary polynucleotide molecules from whence the 5' and 3' modified library is generated is greatly reduced or prevented. CAS INDEXING IS AVAILABLE FOR THIS PATENT. L4ANSWER 2 OF 16 USPATFULL on STN 2009:165538 USPATFULL ΑN TΙ Preparation of templates for methylation analysis

Gormley, Niall, Nr. Saffron Walden, UNITED KINGDOM

Gnirke, Andreas, Cambridge, MA, UNITED STATES Jaffe, David, Cambridge, MA, UNITED STATES Nusbaum, Harris, Cambridge, MA, UNITED STATES

PI US 20090148842 A1 20090611 AI US 2008-69174 A1 20080207 (12) PRAI US 2007-900313P 20070207 (60)

DT Utility FS APPLICATION

LREP KLAUBER & JACKSON, 411 HACKENSACK AVENUE, HACKENSACK, NJ, 07601, US

CLMN Number of Claims: 34 ECL Exemplary Claim: 1 DRWN 16 Drawing Page(s)

LN.CNT 1965

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The invention relates to a method of preparing and using a library of template polynucleotides suitable for use as templates in solid-phase nucleic acid amplification and sequencing reactions to determine the methylation status of the cytosine bases in the library. In particular, the invention relates to a method of preparing and analysing a library of template polynucleotides suitable for methylation analysis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 3 OF 16 USPATFULL on STN

AN 2009:130562 USPATFULL

TI Methods of nucleic acid amplification and sequencing

IN Boutell, Jonathan Mark, Walden Essex, UNITED KINGDOM

Smith, Geoffrey Paul, Walden, UNITED KINGDOM Cox, Anthony James, Walden Essex, UNITED KINGDOM Earnshaw, David James, Walden Essex, UNITED KINGDOM

Schroth, Gary Paul, Walden Essex, UNITED KINGDOM

PI US 20090117621 A1 20090507

AI US 2006-989171 A1 20060720 (11)

WO 2006-GB2693 20060720

20090105 PCT 371 date

PRAI GB 2005-14909 20050720

DT Utility

FS APPLICATION

LREP KLAUBER & JACKSON, 411 HACKENSACK AVENUE, HACKENSACK, NJ, 07601, US

CLMN Number of Claims: 44 ECL Exemplary Claim: 1 DRWN 2 Drawing Page(s)

LN.CNT 2053

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to a method of amplifying one or more nucleic acid templates on a solid support in a nucleic acid amplification reaction, for example by solid-phase PCR using one or more amplification primers attached to the solid support. The method is characterised in that the amplification primers used comprise a template-specific portion which is a sequence of at least 26 consecutive nucleotides and are not capable of annealing to target regions in the template under conditions of the amplification reaction. The method is particularly useful for amplifying human genomic DNA.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 4 OF 16 USPATFULL on STN

AN 2008:327309 USPATFULL

TI Methods and devices for sequencing nucleic acids

IN Lapidus, Stanley N., Bedford, NH, UNITED STATES

Helicos BioSciences Corporation, Cambridge, MA, UNITED STATES (U.S. PAcorporation) РΤ US 20080287306 A1 20081120 US 2007-928643 A1 20071030 (11) ΑI Continuation of Ser. No. US 2004-852028, filed on 24 May 2004, PENDING RLI DT Utility FS APPLICATION COOLEY GODWARD KRONISH LLP, ATTN: Patent Group, Suite 1100, 777 - 6th LREP Street, NW, WASHINGTON, DC, 20001, US Number of Claims: 23 Exemplary Claim: 1 6 Drawing Page(s) LN.CNT 787 CAS INDEXING IS AVAILABLE FOR THIS PATENT. The invention provides methods and devices for high throughput single molecule sequencing of a plurality of target nucleic acids using a universal primer. Devices of the invention comprise a plurality of oligonucleotides, each having the same sequence, bound to a solid support, and ligated to a plurality of target nucleic acids. CAS INDEXING IS AVAILABLE FOR THIS PATENT. L4ANSWER 5 OF 16 USPATFULL on STN 2008:253726 USPATFULL ΑN TΙ Method for retaining even coverage of short insert libraries Gormley, Niall Anthony, Nr. Saffron Walden, UNITED KINGDOM ΤN Smith, Melanie Anne, Nr. Saffron Walden, UNITED KINGDOM PΙ US 20080220986 A1 20080911 ΑI US 2007-895294 A1 20070823 (11) PRAI US 2006-840063P 20060824 (60) DT Utility FS APPLICATION LREP KLAUBER & JACKSON, 411 HACKENSACK AVENUE, HACKENSACK, NJ, 07601, US CLMN Number of Claims: 40 ECL Exemplary Claim: 1 DRWN 3 Drawing Page(s) LN.CNT 1802 CAS INDEXING IS AVAILABLE FOR THIS PATENT. The invention relates to a method of preparing a library of template polynucleotides with uniform sequence representation and to use of a library of templates prepared using this method for solid-phase nucleic acid amplification. In particular, the invention relates to a method of preparing a library of template polynucleotides which have common sequences at their 5' ends and at their 3' ends, which contains even representation of all the fragments present in a starting sample of nucleic acid before fragmentation. The invention is especially applicable to the preparation of short insert libraries, where the sample fragments are less than 150 base pairs in length. CAS INDEXING IS AVAILABLE FOR THIS PATENT. ANSWER 6 OF 16 USPATFULL on STN L4ΑN 2008:11000 USPATFULL Isothermal methods for creating clonal single molecule arrays TΙ IN Schroth, Gary Paul, Hayward, CA, UNITED STATES Lloyd, David Harley, Belmont, CA, UNITED STATES Zhang, Lu, Hayward, CA, UNITED STATES

Barrost, Tobias William, Saffron Walden, UNITED KINGDOM

Boutell, Jonathan Mark, Saffron Walden, UNITED KINGDOM

A1 20080110

Rigatti, Roberto, Saffron Walden, UNITED KINGDOM

PΤ

US 20080009420

```
US 2007-725597 A1 20070319 (11)
ΑТ
PRAT
      US 2006-783618P
                              20060317 (60)
      Utility
DТ
FS
      APPLICATION
      KLAUBER & JACKSON, 411 HACKENSACK AVENUE, HACKENSACK, NJ, 07601, US
LREP
      Number of Claims: 18
CLMN
ECL
       Exemplary Claim: 1
DRWN
       9 Drawing Page(s)
LN.CNT 1839
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention is directed to a method for isothermal
       amplification of a plurality of different target nucleic acids, wherein
       the different target nucleic acids are amplified using universal primers
       and colonies produced thereby can be distinguished from each other. The
       method, therefore, generates distinct colonies of amplified nucleic acid
       sequences that can be analyzed by various means to yield information
       particular to each distinct colony.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
T.4
    ANSWER 7 OF 16 USPATFULL on STN
       2007:147528 USPATFULL
ΑN
TΙ
       Method of preparing libraries of template polynucleotides
ΙN
       Gormley, Niall Anthony, Nr. Saffron Waldon, UNITED KINGDOM
       Smith, Geoffrey Paul, Nr. Saffron Waldon, UNITED KINGDOM
       Bentley, David, Nr. Saffron Waldon, UNITED KINGDOM
       Rigatti, Roberto, Nr. Saffron Waldon, UNITED KINGDOM
PΙ
       US 20070128624 A1 20070607
      US 2006-486953
ΑI
                          A1 20060714 (11)
PRAI
      GB 2005-22310
                               20051101
DT
      Utility
FS
      APPLICATION
LREP
      KLAUBER & JACKSON, 411 HACKENSACK AVENUE, HACKENSACK, NJ, 07601, US
CLMN
      Number of Claims: 29
ECL
      Exemplary Claim: 1
DRWN
      12 Drawing Page(s)
LN.CNT 2068
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention relates to a method for preparing a library of
       template polynucleotides and use thereof in methods of solid-phase
       nucleic acid amplification. More specifically, the invention relates to
       a method for preparing a library of template polynucleotides that have
       common sequences at their 5' ends and at their 3' ends.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 8 OF 16 USPATFULL on STN
T.4
       2005:298944 USPATFULL
ΑN
      Methods and devices for sequencing nucleic
ΤТ
       acids
       Lapidus, Stanley N., Bedford, NH, UNITED STATES
IN
PΙ
       US 20050260609 A1 20051124
                          A1 20040524 (10)
AΙ
       US 2004-852028
DT
       Utility
FS
       APPLICATION
       PROSKAUER ROSE LLP, ONE INTERNATIONAL PLACE 14TH FL, BOSTON, MA, 02110,
```

CLMN Number of Claims: 23 ECL Exemplary Claim: 1 DRWN 6 Drawing Page(s) LN.CNT 788 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides methods and devices for high throughput single molecule sequencing of a plurality of target nucleic acids using a universal primer. Devices of the invention comprise a plurality of oligonucleotides, each having the same sequence, bound to a solid support, and ligated to a plurality of target nucleic acids.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 9 OF 16 USPATFULL on STN

AN 2005:62950 USPATFULL

TI Compositions and methods for analysis of nucleic acids

IN Makarov, Vladimir L., Ann Arbor, MI, UNITED STATES

Langmore, John P., Ann Arbor, MI, UNITED STATES

PI US 20050053986 A1 20050310

US 7270958 B2 20070918

AI US 2004-890483 A1 20040713 (10)

RLI Division of Ser. No. US 2001-801346, filed on 6 Mar 2001, GRANTED, Pat. No. US 6762022 Continuation of Ser. No. US 1998-151236, filed on 10 Sep 1998, GRANTED, Pat. No. US 6197557 Continuation-in-part of Ser. No. US 1998-35677, filed on 5 Mar 1998, ABANDONED

DT Utility

FS APPLICATION

LREP FULBRIGHT & JAWORSKI L.L.P., 600 CONGRESS AVE., SUITE 2400, AUSTIN, TX, 78701

CLMN Number of Claims: 21

ECL Exemplary Claim: CLM-1-104

DRWN 36 Drawing Page(s)

LN.CNT 5793

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Disclosed are a number of methods that can be used in a variety of embodiments, including, creation of a nucleic acid terminated at one or more selected bases, sequence analysis of nucleic acids, mapping of sequence motifs within a nucleic acid, positional mapping of nucleic acid clones, and analysis of telomeric regions. The methods utilize double-stranded templates, and in most aspects involve a strand replacement reaction initiated at one or more random or specific locations created in a nucleic acid molecule, and in certain aspects utilizing an oligonucleotide primer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 10 OF 16 USPATFULL on STN

AN 2003:78476 USPATFULL

TI Enzymatic light amplification

IN Weiner, Michael P., Guilford, CT, UNITED STATES

PI US 20030054396 A1 20030320

AI US 2002-236871 A1 20020906 (10)

PRAI US 2001-318218P 20010907 (60)

US 2001-335950P 20011030 (60)

DT Utility

FS APPLICATION

LREP MINTZ, LEVIN, COHN, FERRIS, GLOVSKY, AND POPEO, P.C., ONE FINANCIAL CENTER, BOSTON, MA, 02111

CLMN Number of Claims: 73

ECL Exemplary Claim: 1

DRWN 9 Drawing Page(s)

LN.CNT 3252

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Reversibly labeled nucleotides and methods involving the nucleotides are disclosed. The methods included methods of determining a sequence of a

nucleic acid.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 11 OF 16 USPATFULL on STN L42003:17365 USPATFULL ΑN ΤI Multiplexed differential displacement for nucleic acid determinations ΤN Singh, Sharat, San Jose, CA, UNITED STATES Inamdar, Anita, Sunnyvale, CA, UNITED STATES Ullman, Edwin F., Atherton, CA, UNITED STATES Cao, Liching, Vallejo, CA, UNITED STATES Albagli, David, Millbrae, CA, UNITED STATES PAACLARA BioSciences, Inc. (U.S. corporation) PΙ US 20030013117 A1 20030116 ΑI US 2002-245030 A1 20020916 (10) Continuation of Ser. No. US 2000-684590, filed on 5 Oct 2000, PENDING RLI Continuation-in-part of Ser. No. US 2000-609279, filed on 30 Jun 2000, PENDING Continuation-in-part of Ser. No. US 1999-354629, filed on 16 Jul 1999, PENDING DT Utility FS APPLICATION

LREP PERKINS COIE LLP, P.O. BOX 2168, MENLO PARK, CA, 94026

CLMN Number of Claims: 48 ECL Exemplary Claim: 1 DRWN 2 Drawing Page(s)

LN.CNT 1498

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Multiplexed determinations of large numbers of events are achieved in an accurate and simple manner by using a multitude of primer reagents in combination with different capture reagents that serve for sequestering all the reagents at a single site, followed by independent release of subsets of the primer reagents using differential release conditions. Also included as part of the primer reagents may be identifiers, which serve to identify a particular characteristic. The method is illustrated using primers with sequences for initiation of chain extension that are joined to or serve as a capture sequence, and where the extended primer has an identifier. After extending the primer, the extended primers are sequestered via the capture sequence onto a sequestering agent, sequentially released and the released extended primers analyzed to provide multiplexed determinations. The subject method finds application for nucleic acid sequencing, single nucleotide polymorphism determinations, identification of nucleic acid fragments, and the like.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
ANSWER 12 OF 16 USPATFULL on STN
L4
       2002:235372 USPATFULL
ΑN
       Assay for genetic polymorphisms using scattered light detectable labels
ΤI
TN
       Bee, Gary, Vista, CA, UNITED STATES
       Kohne, David E., La Jolla, CA, UNITED STATES
       Korb, Linda, San Diego, CA, UNITED STATES
       Peterson, Todd, Coronado, CA, UNITED STATES
       Yguerabide, Juan, La Jolla, CA, UNITED STATES
       US 20020127561
                           A1 20020912
PΙ
                           A1 20010612 (9)
       US 2001-880732
ΑТ
       US 2000-210988P
                               20000612 (60)
PRAI
DT
       Utility
FS
       APPLICATION
LREP
       Wesley B. Ames, FOLEY & LARDNER, 23rd Floor, 402 West Broadway, San
       Diego, CA, 92101-3542
```

CLMN Number of Claims: 58

ECL Exemplary Claim: 1 DRWN 8 Drawing Page(s)

LN.CNT 2494

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Described are methods for determining the presence or absence of particular polymorphisms in CYP2D6 and other genes using scattered light detectable particles as detectable labels, and compositions useful in such methods.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 13 OF 16 USPATFULL on STN

AN 2002:85142 USPATFULL

TI Multiplexed differential displacement for nucleic acid determinations

IN Singh, Sharat, San Jose, CA, UNITED STATES Inamdar, Anita, Sunnyvale, CA, UNITED STATES Ullman, Edwin F., Atherton, CA, UNITED STATES Cao, Liching, Vallejo, CA, UNITED STATES Albagli, David, Millbrae, CA, UNITED STATES

PA Lynx Therapeutics, Inc. (U.S. corporation)

PI US 20020045182 A1 20020418

AI US 2001-929333 A1 20010813 (9)

RLI Division of Ser. No. US 2000-684590, filed on 5 Oct 2000, PENDING Continuation-in-part of Ser. No. US 2000-609279, filed on 30 Jun 2000, PENDING Continuation-in-part of Ser. No. US 1999-354629, filed on 16 Jul 1999, PENDING

DT Utility

FS APPLICATION

LREP PERKINS COIE LLP, P.O. BOX 2168, MENLO PARK, CA, 94026

CLMN Number of Claims: 48 ECL Exemplary Claim: 1 DRWN 2 Drawing Page(s)

LN.CNT 1497

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Multiplexed determinations of large numbers of events are achieved in an AB accurate and simple manner by using a multitude of primer reagents in combination with different capture reagents that serve for sequestering all the reagents at a single site, followed by independent release of subsets of the primer reagents using differential release conditions. Also included as part of the primer reagents may be identifiers, which serve to identify a particular characteristic. The method is illustrated using primers with sequences for initiation of chain extension that are joined to or serve as a capture sequence, and where the extended primer has an identifier. After extending the primer, the extended primers are sequestered via the capture sequence onto a sequestering agent, sequentially released and the released extended primers analyzed to provide multiplexed determinations. The subject method finds application for nucleic acid sequencing, single nucleotide polymorphism determinations, identification of nucleic acid fragments, and the like.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 14 OF 16 USPATFULL on STN

AN 2002:78405 USPATFULL

TI Compositions and methods for analysis of nucleic acids

IN Makarov, Vladimir L., Ann Arbor, MI, UNITED STATES Langmore, John P., Ann Arbor, MI, UNITED STATES

PA The Regents of the University of Michigan (U.S. corporation)

PI US 20020042059 A1 20020411 US 6762022 B2 20040713 AI US 2001-801346 A1 20010306 (9) RLI Continuation of Ser. No. US 1998-151236, filed on 10 Sep 1998, GRANTED, Pat. No. US 6197557 Continuation-in-part of Ser. No. US 1998-35677, filed on 5 Mar 1998, ABANDONED Continuation-in-part of Ser. No. US 1997-811804, filed on 6 Mar 1997, GRANTED, Pat. No. US 6117634

DT Utility

FS APPLICATION

LREP David L. Parker, FULBRIGHT & JAWORSKI L.L.P., 600 Congress Avenue, Suite 2400, Austin, TX, 78701

CLMN Number of Claims: 104

ECL Exemplary Claim: 1

DRWN 38 Drawing Page(s)

LN.CNT 6552

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Disclosed are a number of methods that can be used in a variety of embodiments, including, creation of a nucleic acid terminated at one or more selected bases, sequence analysis of nucleic acids, mapping of sequence motifs within a nucleic acid, positional mapping of nucleic acid clones, and analysis of telomeric regions. The methods utilize double-stranded templates, and in most aspects involve a strand replacement reaction initiated at one or more random or specific locations created in a nucleic acid molecule, and in certain aspects utilizing an oligonucleotide primer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 15 OF 16 USPATFULL on STN

AN 2001:33054 USPATFULL

TI Compositions and methods for analysis of nucleic acids

IN Makarov, Vladimir L., Ann Arbor, MI, United States Langmore, John P., Ann Arbor, MI, United States

PA The Regents of the University of Michigan, Ann Arbor, MI, United States (U.S. corporation)

PI US 6197557 B1 20010306

AI US 1998-151236 19980910 (9)

RLI Continuation-in-part of Ser. No. US 1998-35677, filed on 5 Mar 1998, now abandoned Continuation-in-part of Ser. No. US 1997-811804, filed on 6 Mar 1997, now patented, Pat. No. US 6117634

DT Utility

FS Granted

EXNAM Primary Examiner: Brusca, John S.; Assistant Examiner: Kim, Young

LREP Fulbright & Jaworski, LLP

CLMN Number of Claims: 46

ECL Exemplary Claim: 1

DRWN 67 Drawing Figure(s); 38 Drawing Page(s)

LN.CNT 5768

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Disclosed are a number of methods that can be used in a variety of embodiments, including, creation of a nucleic acid terminated at one or more selected bases, sequence analysis of nucleic acids, mapping of sequence motifs within a nucleic acid, positional mapping of nucleic acid clones, and analysis of telomeric regions. The methods utilize double-stranded templates, and in most aspects involve a strand replacement reaction initiated at one or more random or specific locations created in a nucleic acid molecule, and in certain aspects utilizing an oligonucleotide primer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 16 OF 16 USPATFULL on STN

AN 96:75286 USPATFULL

TI Sequencing of surface immobilized polymers utilizing microflourescence

detection

IN Dower, William J., Menlo Park, CA, United States Fodor, Stephen P. A., Palo Alto, CA, United States

PA Affymax Technologies N.V., Curacao, Netherlands Antilles (non-U.S.

corporation)

PI US 5547839 19960820 AI US 1990-626730 19901206 (7)

RLI Continuation-in-part of Ser. No. US 1990-492462, filed on 7 Mar 1990, now patented, Pat. No. US 5143854 which is a continuation-in-part of

Ser. No. US 1989-362901, filed on 7 Jun 1989, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Houtteman, Scott

LREP Townsend & Townsend & Crew LLP

CLMN Number of Claims: 7 ECL Exemplary Claim: 1

DRWN 11 Drawing Figure(s); 10 Drawing Page(s)

LN.CNT 1779

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Means for simultaneous parallel sequence analysis of a large number of biological polymer macromolecules. Apparatus and methods may use fluorescent labels in repetitive chemistry to determine terminal monomers on solid phase immobilized polymers. Reagents which specifically recognize terminal monomers are used to label polymers at defined positions on a solid substrate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=>

=>